REMARKS

Applicants respectfully request entry of the following amendments and remarks in response to the Office Action mailed October 26, 2009. Applicants respectfully submit that the amendments and remarks contained herein place the instant application in condition for allowance.

Upon entry of the amendments in this response, claims 1, 6, 11, 16, and 21 are pending. In particular, Applicants amend claims 1, 6, 11, and 16. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Allowable Subject Matter

The Office Action indicates that claims 1 and 20 would be allowable if re-written to overcome rejections under 35 U.S.C. §112. Applicants sincerely appreciate the indication of allowable subject matter and submit that claim 20 was canceled in a previous Response. Appellants assume that the Office Action is referring to claim 16, instead of claim 20 and amend claims 1 and 16, as indicated above. Applicants submit that claims 1 and 16, as amended, are allowable.

II. Rejections Under 35 U.S.C. §112

The Office Action indicates that claims 1, 6, 11, and 16 are rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement. More specifically, the Office Action indicates "[f]or purposes of writing this action, the terms 'registered' and 'unregistered' are ignored" (OA page 4, line 18). Accordingly, Applicants delete the terms "registered" and "unregistered" from claims 1, 6, 11, and 16. Applicants submit that this amendment (coupled with the other amendments in this Response) place the present application in condition for allowance.

III. Rejections Under 35 U.S.C. §103

A. Claim 1 is Allowable Over *Horvitz, Takagi, Barrett,* and *Malkin*

On page 3, header I, the Office Action indicates that claim 1 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,182,133 ("*Horvitz*") in view of U.S. Patent No. 5,881,231 ("*Takagi*"), further in view of U.S. Patent No. 5,727,129 ("*Barrett*") further in view of U.S. Patent No. 6,085,193 ("*Malkin*"). However, the Office Action never formally argues that claim 1 is rejected under 35 U.S.C. §103. Additionally, the Office Action indicates that claim 1 is allowable, if rewritten to overcome the 35 U.S.C. §112 rejection (OA page 2, line 13). As there is no elaboration of in any 35 U.S.C. §103 rejection with regard to claim 1, Applicants submit that the inclusion of claim 1 under heading I of page 3 is merely a clerical error and that no such rejection is presented. Regardless, Applicants submit claim 1 is allowable for at least the reason that the cited art fails to disclose, teach, or suggest a "system for facilitating communication between a user and a network of information items, comprising… [a] data collection module further configured to track sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user" as recited in claim 1.

B. Claim 6 is Allowable Over *Horvitz, Takagi, Barrett,* and *Malkin*

The Office Action indicates that claim 6 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,182,133 ("*Horvitz*") in view of U.S. Patent No. 5,881,231 ("*Takagi*"), further in view of U.S. Patent No. 5,727,129 ("*Barrett*") further in view of U.S. Patent No. 6,085,193 ("*Malkin*"). Applicants respectfully traverse this rejection for at least the reason that *Horvitz* in view of *Takagi*, *Barrett*, and *Malkin* fail to disclose, teach, or suggest all of the elements of claim 6. More specifically, claim 6 recites:

A method for facilitating communication between a user and a network of information items, comprising:

providing a multi-layer architecture comprising a client device and a server device;

storing the information items on a remote data storage device, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

configuring the client device having a user interface program thereon, to allow a user to interface with the network and request a download of the information items;

configuring the server device for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory;

collecting and storing, at the server device, successive actions of an authenticated single particular user;

calculating, via a probability module that includes a rules engine, a first probability for each of the links based on the successive actions of the authenticated single particular user on a specific basis that distinguishes between specific users;

tracking sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user;

comparing each of the probabilities to a predetermined threshold value that is determined from business rules, stored in the rules engine, which factor a level of risk of retrieving data that may not be used where the level of risk is restricted to an associated hardware cost of cache memory;

retrieving the information items associated with the links from the remote data storage devices;

enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the single particular user's request for the selected information items;

updating the probabilities assigned to the links with each successive user activity;

retrieving the predicted information items if the user requests an information item other than the predicted information items;

retrieving the predicted information items from the remote data storage devices; and storing the predicted information items in the server cache memory if the user requests the predicted information item; and

downloading, from the server device to the client device, the user requested information item to the client from the server cache memory;

wherein the first probability is calculated based solely on the actions of the single particular user during a past navigation and not as a member of a larger set of users,

> wherein the probability module is further configured to calculate a second probability, the second probability being based on selection data of at least one link from a plurality of users, the probability being used to determine a likelihood that another user will select the at least one link, such that in response to the probability meeting a predetermined threshold, data related to the link will be retrieved prior to the another user selecting the link.

(Emphasis added).

Applicants respectfully submit that claim 6, as amended, is allowable over the cited art for at least the reason that none of *Horvitz*, *Takagi*, *Barrett*, and *Malkin*, taken alone or in combination, discloses, teaches, or suggests a "method for facilitating communication between a user and a network of information items, comprising… ***tracking sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user***" as recited in claim 6. More specifically, the Office Action admits "Claim 1 is indicated as allowable because of the combination of the features including [a data collection module that tracks sequences of navigational events of both the single authenticated and unauthenticated users]" (OA page 3, line 1 and OA page 2, second to last line). Accordingly, Applicants amend claim 6 to include this element from allowable claim 1. For at least this reason, claim 6, as amended, is allowable.

C. Claim 11 is Allowable Over *Horvitz, Takagi, Barrett,* and *Malkin*

The Office Action indicates that claim 11 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,182,133 ("*Horvitz*") in view of U.S. Patent No. 5,881,231 ("*Takagi*"), further in view of U.S. Patent No. 5,727,129 ("*Barrett*") further in view of U.S. Patent No. 6,085,193 ("*Malkin*"). Applicants respectfully traverse this rejection for at least the reason that *Horvitz* in view of *Takagi*, *Barrett*, and *Malkin* fail to disclose, teach, or suggest all of the elements of claim 11. More specifically, claim 11 recites:

> A system for facilitating communication between a user and a network of information items, comprising:

means for providing a multi-layer architecture comprising a client device and a server device;

means for storing the information items on a remote data storage device, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

means for configuring the client device having a user interface program thereon, to allow a user to interface with the network and request a download of the information items;

means for configuring the server device for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory;

means for collecting and storing successive actions of an authenticated particular user;

means for calculating a first probability for each of the links based on the successive actions of the authenticated single particular user on a user specific basis that distinguishes between specific users;

means for tracking sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user;

means for comparing each of the probabilities to a predetermined threshold value that is determined from business rules which factor a level of risk of retrieving data that may not be used where the level of risk is restricted to an associated hardware cost of cache memory;

means for retrieving the information items associated with the links from the remote data storage devices;

means for enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the single particular user's request for the selected information items;

means for updating the probabilities assigned to the links with each successive user activity;

means for retrieving the predicted information items if the user requests an information item other than the predicted information items;

means for retrieving the predicted information items from the remote data storage devices;

means for storing the predicted information items in the server cache memory if the user requests the predicted information item; and

means for downloading the user requested information item to the client from the server cache memory;

wherein the probability is calculated based solely on the actions of the single particular user during a past navigation and not as a member of a larger set of users,

> wherein the server device is further configured to calculate a second probability, the second probability being based on selection data of at least one link from a plurality of users, the probability being used to determine a likelihood that another user will select the at least one link, such that in response to the probability meeting a predetermined threshold, data related to the link will be retrieved prior to the another user selecting the link.

(Emphasis added).

Applicants respectfully submit that claim 11, as amended, is allowable over the cited art for at least the reason that none of *Horvitz*, *Takagi*, *Barrett*, and *Malkin*, taken alone or in combination, discloses, teaches, or suggests a "system for facilitating communication between a user and a network of information items, comprising… ***means for tracking sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user***" as recited in claim 11. More specifically, the Office Action admits "Claim 1 is indicated as allowable because of the combination of the features including [a data collection module that tracks sequences of navigational events of both the single authenticated and unauthenticated users]" (OA page 3, line 1 and OA page 2, second to last line). Accordingly, Applicants amend claim 11 to include this element from allowable claim 1. For at least this reason, claim 11, as amended, is allowable.

D. Claim 16 is Allowable Over *Horvitz, Takagi, Barrett,* and *Malkin*

The Office Action indicates that claim 16 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,182,133 ("*Horvitz*") in view of U.S. Patent No. 5,881,231 ("*Takagi*"), further in view of U.S. Patent No. 5,727,129 ("*Barrett*") further in view of U.S. Patent No. 6,085,193 ("*Malkin*"). Applicants respectfully traverse this rejection for at least the reason that *Horvitz* in view of *Takagi*, *Barrett*, and *Malkin* fail to disclose, teach, or suggest all of the elements of claim 16. More specifically, claim 16 recites:

> A first network for facilitating communication between a user and a network of information items, comprising:

a remote data storage device for storing the information items, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

a multi-layer architecture comprising:

a client device having a user interface program thereon, for allowing a user to interface with the network and request a download of the information items;

a server device, in communication with the client device and in communication with the remote storage device, for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory; and

the first network;

a data collection module for collecting and storing, at the server device, successive actions of an authenticated single particular user on a user specific basis that distinguishes between specific users, ***the data collection module further configured to track sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user***; and

a probability module in communication with the data collection module for calculating a probability for each of the links based on the successive actions of the authenticated single particular user, and for comparing each of the probabilities to a predetermined threshold value that is determined from business rules which factor a level of risk of retrieving data that may not be used where the level of risk is restricted to an associated hardware cost of cache memory, and for retrieving the information items associated with the links from the remote data storage devices and enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the single particular user's request for the selected information items, the probability module including a rules engine for storing the business rules,

wherein the probability module updates the probabilities assigned to the links with each successive user activity;

wherein the probability module aborts retrieving the predicted information items if the user requests an information item other than the predicted information items;

wherein the probability module continues retrieving the predicted information items from the remote data storage devices and storing the predicted information items in the server cache memory if the user requests the predicted information item; and

wherein the probability module downloads the user requested information item to the client from the server cache memory;

> wherein the probability is calculated based solely on the actions of the single particular user during a past navigation and not as a member of a larger set of users,
>
> wherein the probability module is further configured to calculate a second probability, the second probability being based on selection data of at least one link from a plurality of users, the probability being used to determine a likelihood that another user will select the at least one link, such that in response to the probability meeting a predetermined threshold, data related to the link will be retrieved prior to the another user selecting the link.

(Emphasis added).

Applicants respectfully submit that claim 16, as amended, is allowable over the cited art for at least the reason that none of *Horvitz*, *Takagi*, *Barrett*, and *Malkin*, taken alone or in combination, discloses, teaches, or suggests a "first network for facilitating communication between a user and a network of information items, comprising… a data collection module for collecting and storing, at the server device, successive actions of an authenticated single particular user on a user specific basis that distinguishes between specific users, ***the data collection module further configured to track sequences of navigational events of both the single particular authenticated user and at least one unauthenticated user***" as recited in claim 16. More specifically, the Office Action admits "Claim 1 is indicated as allowable because of the combination of the features including [a data collection module that tracks sequences of navigational events of both the single authenticated and unauthenticated users]" (OA page 3, line 1 and OA page 2, second to last line). Accordingly, Applicants amend claim 16 to include this element from allowable claim 1. For at least this reason, claim 16, as amended, is allowable.

E. Claim 21 is Allowable Over *Horvitz, Takagi, Barrett,* and *Malkin*

Additionally, the Office Action neglects to reject claim 21. Applicants respectfully submit that this is a violation of MPEP §707 and 37 C.F.R. §1.104, which states "[t]he examiner's action will be complete as to all matters…" Accordingly, Applicants submit that any subsequent Office Action, if necessary must be non-final.

However, notwithstanding this ommission, Applicants submit that claim 21 is allowable for at least the reason that this claim depends from allowable independent claim 1. *In re Fine*, *Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, all objections and/or rejections have been traversed, rendered moot, and/or addressed, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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